according to a twenty-fifth embodiment of the present invention, in order to further ensure the effect of the twenty-fourth embodiment, the mean particle diameter of one inorganic filler 6f-1 of the inorganic fillers 6f-1 and 6f-2, which have the plurality of different mean particle diameters, is two or more times different from the mean particle diameter of the other inorganic filler 6f-2. As a concrete example, an inorganic filler having a mean particle diameter of 0.5 μm and an inorganic filler having a mean particle diameter of 2 to 4 μm are employed.

With this arrangement, the effect of the twenty-fourth embodiment can further be improved. That is, by mixing the insulating resin 306m with the inorganic fillers 6f-1 and 6f-2, which have the plurality of different mean particle diameters and in which the mean particle diameter of one inorganic filler 6f-1 is two or more times different from the mean particle diameter of the other inorganic filler 6f-2, the amount of the inorganic filler 6f to be mixed with the insulating resin 306m can be more reliably increased. This arrangement facilitates the film formation (solidification), increases the loadings of the inorganic filler 6f in the resin sheet 6 or the adhesive 306b and enables the further reduction in the coefficient of linear expansion of the resin sheet 6 or the adhesive 306b, allowing the operating life to be increased for further

improvement of reliability.

(Twenty-Sixth Embodiment)

Next, according to a method and apparatus for mounting an electronic component of, for example, an IC chip on a circuit board and an electronic component unit or module of, for example, a semiconductor device in which the IC chip is mounted on the board by the mounting method, according to a twenty-sixth embodiment of the present invention, in order to further ensure the effect of the twenty-fourth embodiment, it is preferable to provide the inorganic filler 6f to be mixed with the insulating resin 306m by at least two types of inorganic fillers 6f-1 and 6f-2, which have a plurality of different mean particle diameters, make one inorganic filler 6f-1 out of at least two types of inorganic fillers have a mean particle diameter exceeding 3 μm and make the other inorganic filler 6f-2 out of at least two types of inorganic fillers have a mean particle diameter of not greater than 3 μm. As a concrete example, an inorganic filler having a mean particle diameter of 0.5 μm and an inorganic filler having a mean particle diameter of 2 to 4 μm are employed.

(Twenty-Seventh Embodiment)

Next, according to a method and apparatus for mounting an electronic component of, for example, an IC chip on a circuit board and an electronic component unit or

module of, for example, a semiconductor device in which the IC chip is mounted on the board by the mounting method, according to a twenty-seventh embodiment of the present invention, based on each of the aforementioned embodiments, it is acceptable to provide the inorganic filler 6f to be mixed with the insulating resin 306m by at least two types of inorganic fillers 6f-1 and 6f-2, which have a plurality of different mean particle diameters, and constitute one inorganic filler 6f-1 of the larger mean particle diameter out of at least two types of inorganic fillers by a material identical to that of the insulating resin 306m, producing a stress alleviating effect. As a concrete example, an inorganic filler having a mean particle diameter of 0.5 μm and an inorganic filler having a mean particle diameter of 2 to 4 μm are employed.

According to this twenty-seventh embodiment, the stress alleviating effect can be produced in addition to the operative effect of the twenty-fourth embodiment by virtue of the arrangement that the one inorganic filler 6f-1 of the larger mean particle diameter is made of the material identical to that of the insulating resin 306m and the integration of the one inorganic filler 6f-1 of the larger mean particle diameter with the insulating resin 306m when a stress is exerted on the insulating resin 306m.

(Twenty-Eighth Embodiment)